UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TENNESSEE
WESTERN DIVISION

B.E. TECHNOLOGY, LLC, Plaintiff, vs. AMAZON DIGITAL SERVICES, INC., Defendant.	No.: 2:12-cv-02767-JPM-tmp **JURY DEMAND**

MEMORANDUM OF DEFENDANT
AMAZON DIGITAL SERVICES, INC. IN SUPPORT OF ITS MOTION TO DISMISS

Glen G. Reid, Jr. (#8184)
greid@wyattfirm.com
Mark Vorder-Bruegge, Jr. (#06389)
mvorder-bruegge@wyattfirm.com
WYATT, TARRANT & COMBS, LLP
The Renaissance Center
1715 Aaron Brenner Dr., Suite 800
Memphis, TN 38120-4367
(901) 537-1000

Counsel for Defendant
AMAZON DIGITAL SERVICES, INC.

J. David Hadden
dhadden@fenwick.com
Darren F. Donnelly
ddonnelly@fenwick.com
Saina S. Shamilov
sshamilov@fenwick.com
Ryan J. Marton
rmarton@fenwick.com
Clifford Web
cweb@fenwick.com
Justin Hulse
jhulse@fenwick.com
FENWICK & WEST LLP
801 California Street, 6th Floor
Mountain View, CA 94041
(650) 988-8500

TABLE OF CONTENTS

Page

TABLE OF AUTHORITIES

Cases: *Page(s):*

INTRODUCTION

A patent that purports to own all possible ways of achieving a result (even a new and useful result), while disclosing none, is invalid as a matter of law. This maxim, alone sufficient to decide this case, follows from two of the most important rules of our patent system—both essential to maintaining the proper balance between an inventor's right to exploit his *particular* contribution to the public, on the one hand, and the public's right to create still better ways of achieving the same result, on the other.

The first rule is the prohibition against purely "functional claiming"—*i.e.*, describing an invention not by what it *is* or how it *achieves* its result, but rather by the *result itself* independent of any particular structure or method. A purely functional patent is, by definition, not limited to an inventor's actual contribution to the public, but rather seeks to own as private property all ways, both present and future, of solving a particular problem. Purely functional patents, therefore, offend the patent system in at least two important ways. First, they award to private individuals monopoly power over vast swaths of technologies that the named inventors never conceived, much less invented. And second, they deprive the public of all future incentives to create new and improved technologies, thereby stifling innovation and frustrating the progress of science and the useful arts—the sole object of our patent laws.

The second rule, a corollary of the first, is the "possession rule," which requires that an inventor describe in his patent his *particular* solution to a problem in sufficient detail to assure the public that the inventor has, in fact, invented what he claims. Patents that claim only the *result* of a solution, but not the particular *solution* itself, offend the "possession rule" in at least two important ways. First, they result in numerous and disparate technologies owned by private parties who have not, in fact, invented anything. And second, they free-ride on others to do the heavy lifting of true invention only to burden such inventors with monopoly rents. Patents that offend the "possession rule" do not promote the progress of science and the useful arts. Rather,

they simply tax the public for purely private benefits while creating additional social costs in the form of needless litigation.

Here, the patents-in-suit offend both the "functional claiming rule" and the "possession rule." Both patents claim a new and improved software program, and yet neither describes any particular software, system logic, algorithm, or programming. At the same time, the plaintiff seeks to appropriate a vast swath of modern American technologies, including the highly-sophisticated and disparate systems developed, owned and operated by the likes of Amazon, Google, Apple, Motorola, Facebook, Twitter, LinkedIn, Samsung, Sony, and others. The social costs of this massive patent litigation, involving as it does facially invalid patents, will be incalculable unless interrogated vigorously at the very outset of this case, which this Court is empowered to do by our patent and procedural laws, and which, as a matter of sound public policy, this Court ought to do at the earliest possible juncture consistent with the plaintiff's right to be heard.

For these reasons, and for the reasons stated more fully below, Amazon moves, pursuant to Rule 12(b)(6) of the Federal Rules of Civil Procedure, to dismiss plaintiff's complaint with prejudice.

STATEMENT OF FACTS

A. The Parties

1. B.E. Technologies

Plaintiff B.E. Technologies ("B.E.") is a patent assertion entity ("PAE") that registered to do business in Tennessee one day before filing this lawsuit. According to B.E.'s lead counsel, B.E.'s sole "business" is prosecuting lawsuits in this district. As a PAE, B.E. does not make or sell any products or services, much less make any beneficial use of the technologies that it claims to own. Nor has it ever notwithstanding that the patents-in-suit were filed in 1998 (Dkt. 9, Exs. A and B)—nearly 15 years ago.

2. Amazon

Defendant Amazon Digital Services, Inc. ("Amazon") is a wholly owned subsidiary of Amazon.com, Inc.—a Delaware corporation with its principle place of business in Seattle, Washington. Widely known as the world's largest online retailer, Amazon is also regarded as one of America's most innovative technology companies. Through its online retail business, Amazon transformed the way the public acquires consumer products, and in the process dramatically expaned consumer choice while greatly reducing consumer costs—especially in remote regions of the nation where access to consumer products is often limited. Through its web-based and IT services, Amazon has helped launch countless American small businesses, and empowered still countless others, who today sell tens of millions of products to otherwise unknowable customers worldwide. And through its Kindle brand of e-readers, Amazon revolutionized the way the public acquires and relates to the printed word—once again, dramatically increasing consumer choice while greatly reducing consumer costs.

B. The Patents-In-Suit

B.E. alleges infringement of two related patents: U.S. Patent No. 6,141,010 (the "'010 patent") and U.S. Patent No. 6,771,290 (the "'290 patent"), which is a continuation-in-part of the '010 patent. B.E. asserts claim 1 of the '010 patent and claim 2 of the '290 patent. (*See* Dkt. No. 9, ¶¶ 14, 17.)

The '010 patent is entitled "Computer Interface Method and Apparatus with Targeted Advertising." (*Id.*, Exh. B.) As the title suggests, the '010 patent is directed to a computer program that provides targeted advertisements over the Internet. (*Id.*, Abstract.) The patent acknowledges that targeted Internet advertising was well-known and performed by numerous prior art systems. (*See generally id.* col. 1, l. 14 - col. 3, l. 29.) According to the patent, in these existing software systems, the details of how the advertisements were displayed on users' computers, including "where on the screen the advertisement is displayed, the display size, [and] the

duration of display," were "built into the software [program] itself." (*Id.* col. 2, ll. 6-21.) Thus, according to the patent, changing anything about the display of the advertisements required updating the entire program. (*Id.*) To solve this purported problem, the patent suggests breaking the program into two pieces or "modules," which can be updated independently. The first program module "display[s] a graphical user interface." (*Id.* col. 4, ll. 22-26.) The second program module selects specific banner advertisements based on the user's interactions with the graphical user interface displayed by the first module. (*Id.* col. 4, ll. 41-49.) How the program modules perform these functions, or even communicate with each other, is never described in the patent.

Instead, the program modules are described solely by their functions, *i.e.*, what each module is "operable to perform." For example, claim 1 recites that the first program module is "*operable* upon execution to display a graphical user interface," and that the second program module is "*operable* upon execution to select informational data to be displayed." (*Id.* col. 21, ll. 38-39 and 50-51) (emphasis added). But nowhere does the patent explain how the modules generate the claimed graphical user interface or select the informational data to be displayed. Nor is there a single figure or flowchart showing even a single step that this software performs to achieve either result. Rather, these purportedly novel software "modules" are described as mere black boxes defined, again, solely by their functions.

The '290 patent is no better. It envisions a software program that organizes user information, such as a list of favorite websites, by storing such information on a network server. According to the patent, existing web browsers allowed users to store information "regarding visited or favorite websites," for example, by bookmarking a webpage of interest. (*Id.* col. 3, ll. 49-52.) Those web browsers, however, purportedly did not allow users to share that information across multiple browsers because "information within one browser [was] not easily transportable to the other browser." (*Id.* col. 3, ll. 60-62.) To solve this problem, the patent suggests storing a user's list of favorite websites and links (*e.g.*, bookmarks) in a "user library" on a server instead

of within the user's browser. (*Id.* col. 13, ll. 7-11.) But, again, the patent does not explain how—even as it expressly concedes that storing user files on servers was known in the art when the patent was filed. (*Id.* col. 3, ll. 54-57.) Again, no new hardware or software is mentioned, much less any algorithms—novel or otherwise—for storing, selecting or retrieving information stored in a "user library."

Instead of describing *how* this mystery software works, the '290 patent describes a salmagundi of results that the software can somehow achieve: "The present invention can be used in a wide variety of applications and for a wide variety of uses … to store software, business presentations, blueprints, plans, movies, musical albums, games … to shop on line … [to record] radio … [and] communicate [with] … cellular telephones, walkmans, kiosks, personal digital assistants, refrigerator door screens, airplane set screens, car radios, televisions, video recorders, answering machines and the like." (*See generally id.* col. 34, ll. 60-65; col. 35, l. 54 – col. 37, l. 43.) And again, the software is claimed purely by the desired result, *e.g.*, it is "operable … to access the associated information resource over the network." (*Id.* col. 39, ll. 17 & col. 40, ll. 2.)

C. This Action

On September 7, 2012, as part of a broad campaign of patent infringement lawsuits in this district,[1] B.E. filed this lawsuit accusing Amazon's popular Kindle® brand of tablets of infringing the '290 patent. (*See* Dkt. No. 1.) Shortly thereafter, B.E. filed an amended complaint adding claims under the '010 patent. (*See* Dkt. No. 9.) This motion is Amazon's response to B.E.'s amended complaint.

[1] Case Nos. 12-cv-02830, 12-cv-02866, 12-cv-02767, 12-cv-02769, 12-cv-02772, 12-cv-02781, 12-cv-02782, 12-cv-02783, 2:12-cv-02823, 12-cv-02824, 12-cv-02825, 2:12-cv-02826, 12-cv-02827, 12-cv-02828, 12-cv-02829, 12-cv-02831, 12-cv-02832, 12-cv-02833, and 12-cv-02834 naming as defendants Motorola Mobility Holdings LLC; Google Inc.; LinkedIn, Inc.; Facebook, Inc.; Groupon, Inc.; Pandora Media, Inc.; Twitter, Inc.; Barnes & Noble, Inc.; Samsung Telecommunications America, LLC; Samsung Electronics America, Inc.; Sony Computer Entertainment; Sony Mobile Communications; Sony Electronics, Inc.; Microsoft Corp.; Apple, Inc.; Spark Networks, Inc.; People Media, Inc.; and Match.com LLC.

ARGUMENT

"Low-quality patents—that is, patents that are obvious, overly broad, or unclear in the inventive territory that they cover—[] hinder innovation. This is because although patents may be low quality, they can nonetheless be profitably asserted against genuine innovators in litigation." (Rai, A. *et al.,* U.S. Dept. of Commerce, *Patent Reform: Unleashing Innovation, Promoting Economic Growth & Producing High-Paying Jobs* (Apr. 13, 2010), attached hereto as Exhibit A, at p. 5.) Because of the time and cost of defending against even plainly invalid patents, "many invalid patents are never challenged in our current litigation system." (*Id*.) Yet, invalid patents asserted by PAEs "deter innovation by raising costs and risks without making a technological contribution" to the public weal. (U.S. Fed. Trade Comm'n, *Evolving IP Marketplace: Aligning Patent Notice and Remedies With Competition*, 2011 WL 838912, at *7 (Mar. 2011).) To avoid this, the Federal Trade Commission "urges that courts extend their recent focus on indefiniteness to address functional claiming." (*Id*. at *10.)

Indefiniteness under 35 U.S.C. § 112 is a question of law. *Datamize, LLC v. Plumtree Software, Inc*., 417 F.3d 1342, 1347 (Fed. Cir. 2005). A patent can be held invalid "based solely on the language of the patent specification." *Univ. of Rochester v. G.D. Searle & Co., Inc*., 358 F.3d 916, 927 (Fed. Cir. 2004). Courts can and should dispense with facially invalid patents at the pleading stage. *See* Federal Rule of Civil Procedure 12(b)(6); *OIP Technologies, Inc. v. Amazon.com, Inc.*, No. C-12-1233 (N.D. Cal. Sep. 11, 2012) (Dkt. No. 50); *Glory Licensing LLC v. Toys "R" Us, Inc.*, No. 09-4252, 2011 WL 1870591 at *4 (D.N.J. May 16, 2011); *Ultramercial, LLC v. Hulu, LLC*, No. 09-6918, 2010 WL 3360098 at *7 (C.D. Cal. Aug. 13, 2010); *Select Controls v. Am. Elec. Components, Inc*., No. 07-1306, 2008 WL 216612 at *2-5 (S.D.N.Y. Jan. 22, 2008).

I. THE ASSERTED PATENTS VIOLATE THE FUNCTIONAL CLAIMING RULE AND ARE, THUS, INDEFINITE.

A. The Patent Law Prohibits Purely Functional Claiming.

Paragraph 2 of Section 112 (of Title 35) requires that a patent "particularly point[] out and distinctly claim[] … the invention." (35 U.S.C. § 112(b).) The law "require[s] inventors to describe their work in 'full, clear, concise, and exact terms' … as part of the delicate balance the law attempts to maintain between inventors, who rely on the promise of the law to bring the invention forth, and the public, which should be encouraged to pursue innovations, creations, and new ideas beyond the inventor's exclusive rights." *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co*., 535 U.S. 722, 731 (2002) (citation omitted). This requirement "is met only when [the claims] clearly distinguish what is claimed from what went before in the art and clearly circumscribe what is foreclosed from future enterprise." *United Carbon Co. v. Binney & Smith Co.*, 317 U.S. 228, 236 (1942); *see also Halliburton Energy Servs., Inc. v. M-I LLC*., 514 F.3d 1244, 1253 (Fed. Cir. 2008).

It has long been the rule that "[p]atents for a machine will not be sustained if the claim is for a result." *Fuller v. Yentzer*, 94 U.S. 288, 288 (1876). This is because a *result*, without more, is not an *invention*. Rather, an invention "consists in the means or apparatus *by which the result is obtained*." *Id.* (emphasis added). The rule is a cornerstone of our patent system. Indeed, more than a century ago, the Supreme Court invalidated Samuel Morse's claim to "electromagnetism, however developed for marking or printing intelligible characters, signs, or letters at any distances" because it would impermissibly grant Morse "the exclusive right to every improvement … it matters not by what process or machinery the result is accomplished." *O'Reilly v. Morse* 56 U.S. 62, 62 & 112-113 (1853). In so holding, the Court explained the rule in terms that apply with equal force here, particularly with respect to the harm to innovation caused by purely functional claims:

> [S]ome future inventor, in the onward march of science, may discover a mode of writing or printing at a distance by means of the electric or galvanic current, without using any part of the process or combination set forth in the plaintiff's specification. His invention may be less complicated—less liable to get out of order—less expensive in construction, and in its operation. But yet if it is covered by this patent, the inventor could not use it, nor the public have the benefit of it, without the permission of this patentee.

O'Reilly, 56 U.S. at 113.

In *Halliburton*, the Supreme Court again invalidated functional claims where the claims described an invention "in terms of *what it will do*, rather than in terms of its own physical characteristics." *See Halliburton Oil Well Cementing Co v. Walker*, 67 S. Ct. 6, 10 (1946) (emphasis added). The Court explained that such claims are invalid because they would improperly cover all possible future devices that performed the same function. *Id*. at 12.

Partly in response to the Supreme Court's decision in *Halliburton*, Congress amended the patent laws to prohibit purely functional claims unless the patent expressly discloses specific structures or steps for performing a claimed function, and limited the scope of such claims to the structures or steps disclosed:

> An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

(35 U.S.C. § 112(f).) *See also Greenberg v. Ethicon Endo-Surgery Inc.*, 91 F.3d 1580, 1582 (Fed. Cir. 1996) ("Congress permitted the use of purely functional language in claims but limited the breadth of such claim language by restricting the scope to the structure disclosed in the specification and equivalents thereof").

Accordingly, if a patent does not describe a *specific way* of achieving a claimed result—otherwise referred to as a specific "structure" for performing a claimed "function"—the claim is invalid. "Fulfillment of the § 112, ¶ 6 tradeoff cannot be satisfied when there is a total omission

of structure. There must be structure in the specification." *Atmel Corp. v. Information Storage Devices, Inc.*, 198 F.3d 1374, 1382 (Fed. Cir. 1999); *see also Aristocrat Techs. Austl. Pty Ltd. v. Int'l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008) ("The point of the requirement that the patentee disclose particular structure in the specification and that the scope of the patent claims be limited to that structure is to avoid pure functional claiming").

Where, as here, a patent recites a software program, the required "structure" must be the specific algorithm or program logic used by the new software, not the processors, disks and other components found in general purpose computers. "Because general purpose computers can be programmed to perform very different tasks in very different ways, simply disclosing a computer as the structure designated to perform a particular function does not limit the scope of the claim to 'the corresponding structure, material, or acts' that perform the function." *Aristocrat Techs.*, 521 F.3d at 1333; *see also Noah v. Intuit*, 675 F.3d 1302, 1312 (Fed. Cir. 2012) (in computer-implemented inventions the required structure is "an algorithm for performing the claimed function") (citing *NetMoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1328, 1333 (Fed. Cir. 2008).) An algorithm is a set of specific steps a computer is programmed to perform to achieve the claimed function. *Id.*

B. The Purely Functional Language of the Asserted Claim of the '290 Patent Renders It Indefinite.

B.E. alleges that Amazon infringes claim 2 of the '290 patent. Claim 2 recites a "computer-readable memory" with a "non-volatile storage device." However, as standard computer hardware components—*e.g.*, RAM and hard drives—these components cannot serve as the necessary structures for performing the functions of the invention. *HTC Corp.* v. *IPCom GMBH & Co., KG*, 667 F.3d 1270, 1278 (Fed. Cir. 2012) (an algorithm, not hardware is the required structure); *Asentinel LLC v. Cass Info. Sys., Inc.*, Case No. 2:10-cv-02706, 2012 WL 1097336 at *4

(W.D. Tenn., Mar. 30, 2012) ("Rather than relying on [computer hardware], [a patentee] ha[s] to identify an algorithm that the computer hardware execute[s]").

And what are those functions? There are four: (1) "display a graphical user interface comprising an application window having a number of user-selectable items"; (2) "in response to selection by a user of one of said items [] access the associated information resource over the network"; (3) "receive from server one of the user profiles and display a user-selectable item for user links contained within the user profile"; and (4) "in response to selection by a user of one of the user links [] access the file associated with the selected user link." ('290 patent, claim 2, col. 39, l. 1 – col. 40, l. 11.) And yet the patent nowhere discloses any algorithm for performing even one, much less all four, of these functions.

Rather, the specification consistently defines the invention solely as a computer program comprising an unidentified set of instructions. ('290 patent, col. 4, ll. 54-61.) But a "computer program," so defined, necessarily includes any and all software and thus does not denote any specific structure or limitation on the scope of what is claimed. *Aristocrat*, 521 F.3d at 1334 ("appropriate programming" does not denote required structure); *Finisar Corp. v. DirectTV Group, Inc*., 523 F.3d 1323, 1340-41 (Fed. Cir. 2008) ("Simply reciting 'software' without providing some detail about the means to accomplish the function is not enough"); *Altiris, Inc. v. Symantec Corp*., 318 F.3d 1363, 1376 (Fed. Cir. 2003) ("[M]erely pointing out that the relevant structure is software rather than hardware is insufficient"); *Ex Parte Roussi*, Appeal 2010-003169 (attached as Exhibit B) at p. 5 (BPAI 2010) (reference to "software" in a claim denotes no particular structure and is simply a substitute for the word "means" in Section 112, paragraph 6); *Ex Parte Rodriguez*, Appeal 2008-000693 (attached as Exhibit C) at p. 22 (BPAI 2009) ("system builder" and similar software components do not denote structure and are subject to Section 112, paragraph 6). In short, the patent is drafted in purely functional terms, and, as such, the

claims must satisfy the requirements of Section 112, paragraph 6, to be valid.[2] *See, e.g., Greenberg*, 91 F.3d at 1582.

The specification does not describe an algorithm for performing any of the four claimed functions. With respect to the first function, "display[ing] a graphical user interface," figures 4, 5 and 9 mention the terms "graphical user interfaces" or "GUIs," and figures 4 and 5 illustrate examples of graphical user interfaces. But these examples do not describe an algorithm for how these extant graphical user interfaces can be generated and displayed. And while figure 9 is a flow chart that illustrates a box labeled "Display GUI," a box in a flow chart labeled with the function itself is not an algorithm for performing that function. *Eplus, Inc. v. Lawson Software, Inc.*, No. 2011-1396, -1456, -1554, slip op. at 16 (Fed. Cir. Nov. 21, 2012) (attached as Exhibit D) ("And, step 114 in Figure 3 to which ePlus refers … is just a black box that represents the purchase-order generation *function* without any mention of a corresponding structure") (emphasis in original).

The text of the specification states that "GUI module 52 provides the programming used to display application window 24 including all of its various regions on a computer monitor or display 26." ('290 patent, col. 17, ll. 44-46.) This passage does not describe how "GUI Module 52 provides the required "programming"; it merely recites what the module aspires to do without any explanation of how it does it. Like the description of the "access control manager" in *Blackboard, Inc. v. Desire2Learn, Inc.*, 574 F. 3d 1371 (Fed. Cir. 2009), "that is not a description of structure, what the patent calls the ["GUI module"] is simply an abstraction that describes the function. … The ["GUI module"] is essentially a black box that performs a recited function. But

[2] Although claims that do not use the term "means" are presumed not to invoke the requirement of 35 U.S.C. § 112, ¶ 6, that presumption is rebutted where the claim recites functions without reciting sufficient structures to perform the functions. *Mass. Inst. of Tech. v. Abacus Software*, 462 F.3d 1344, 1353-54 (Fed. Cir. 2006). Here, the claim term "program" does not connote sufficient structure to perform even one of the claimed functions, and thus the claim must be construed under 35 U.S.C. § 112, ¶ 6.

how it does so is left undisclosed." *Id*. at 1383. The specification further states that "[t]he user interface provided by GUI module 52 is implemented using a number of program components written in ActiveX™, Java™, or any other suitable programming language." ('290 patent, col. 17, ll. 49-52.) That one of ordinary skill using one of the listed programming languages could create a program that would display the required graphical user interface does not render claim 2 definite. "A patentee cannot avoid providing specificity as to structure simply because someone of ordinary skill in the art would be able to devise a means to perform the claimed function. To allow that form of claiming under section 112, paragraph 6, would allow the patentee to claim all possible means of achieving a function." *Blackboard,* 574 F.3d at 1385.

The specification discloses no algorithm for performing the second function, "access[ing] the associated information resource over the network" in response to the user's selection. None of the figures illustrates an algorithm for accessing an information resource. The specification merely repeats the function and desired result: "[T]he apparatus further includes … resources represented by the user selectable links contained within the first program module, in order that an individual user can gain access to those files and resources from a computer having network access." ('290 patent, col. 5, ll. 43-48.)

For the third function, "receiv[ing] from server one of the user profiles and [] display[ing] a user-selectable item for user links contained within the user profile," the specification merely identifies another structure-less black box for performing the claimed function: "user profile access component 102 contains the programming by which software application 10 can access, use, manage, and change the user profile that resides on server 22." (*Id.* col. 18, ll. 18-21.) This language "describes an outcome, not a means for achieving that outcome." *Aristocrat,* 521 F.3d at 1334.

Nor does the specification disclose an algorithm to perform the fourth function, "access[ing] the file associated with the selected user link from the user library associated with the

received user profile." The specification again reiterates only the desired result: "By storing the user profile and user library on server 22, the user can have world-wide access to their [*sic*] preferences, addresses, bookmarks, email, and files." ('290 patent, col. 13, ll. 8-10.) As in *Eplus*, "[t]he patentee has in effect claimed everything that [accesses a file] under the sun. The system claims are therefore indefinite." *Eplus,* slip op. at 17.

C. The Purely Functional Language of the Asserted Claim of the '010 Patent Renders It Indefinite.

B.E. accuses Amazon of infringing claim 1 of the '010 patent. Claim 1 claims an "apparatus" with a standard hardware component "non-volatile data storage device"—again, not a sufficient structure to perform any computer-implemented functions. *HTC Corp.*, 667 F.3d at 1278. The claim is directed to two "program modules"—*i.e.*, "a first program module" and "a second program module" "operable" to perform computer-implemented functions. ('010 patent, claim 1.) The term "module," like the terms "program" and "software," inherently connotes no structure. *Kozam v. Phase Forward , Inc.*, No. 04-1787, 2005 U.S. Dist. Lexis 46850 at *18 (D. Md., Aug. 29, 2005) ("module" is a software component that denotes no structure required by section 112, paragraph 6); Supplementary Examination Guidelines for Determining Compliance with 35 U.S.C. 112 and for Treatment of Related Issues in Patent Applications, 76 Fed. Reg. 7171 (Feb. 9, 2011) (attached as Exhibit E) ("Examination Guidelines") at 7171 ("module for" does not connote a structure).

Here again, each "module" is claimed solely by its functions, *i.e.*, what it is "operable" to do. The first module is "operable" to perform three functions: (1) "to display a graphical user interface"; (2) "to activate a separate browser application"; and (3) "to notify the second module of the selection." The second module is "operable" to perform another three functions: (1) "to select information data to be displayed"; (2) "in response to notifications from said first program to select the information data to be displayed from among a larger amount of [] informational

data"; and (3) "to store statistical data regarding the display of said selected informational data." ('010 patent, col. 21, l. 32 – col. 22, l. 4.) The specification fails to disclose an algorithm for performing *any*, much less *all*, of these functions.

The first function that the first module is "operable" to perform—"display[ing] a graphical user interface"—is the same function claimed in claim 2 of the '290 patent. As described above, no algorithm for displaying a graphical user interface is disclosed in the '290 patent. The specification of its parent, the '010 patent, also fails to disclose such an algorithm. The '010 patent includes the same figure 9 from the '290 patent. That figure illustrates the same box labeled "Display GUI"—the claimed function. This illustration denotes no algorithm for achieving that result. *Eplus*, slip op. at 16. The text of the specification provides no algorithm, but rather relies on one of "skill in the art" to invent it: "The programming used to generate the display" "is well within the level of skill in the art." ('010 patent, col. 9, ll. 35-39.) Skill in the art does not obviate the requirement that the inventor disclose his own solution. *Blackboard*, 574 F.3d at 1385; *see also Noah*, 675 F.3d at 1317 ("That various methods might exist is 'precisely why' the disclosure of specific programming is required") (citation omitted).

With respect to the second function to be performed by the first module, "activat[ing] a separate browser application," figure 11 of the '010 patent illustrates a box labeled "Run Default Browser and open Selected Link." The figure simply reiterates the function of "activating a separate browser application" without providing any algorithm for doing so. *Blackboard*, 574 F.3d at 1383 (language that describes the function to be performed describes an outcome not a means for achieving that outcome).

The final function of the first module, "notify[ing] the second module of a selection," is not even identified in the figures of the '010 patent. The specification merely repeats the functional language from the claim: "The first program module is operable in response to selection of a first one of the links to provide the user with access to its associated information resource and

to notify the second program module of the selection of that first link." ('010 patent, col. 4, ll. 37-41.) Repeating functional language from the claim, without providing any details about how that function is to be performed, is insufficient to comply with the patent statute. *Blackboard,* 574 F.3d at 1383; *Eplus,* slip op. at 16.

With respect to the functions performed by the second program module, none of the figures of the '010 patent illustrates an algorithm for performing any of those functions. Nor does the rest of the specification. The first function, "select[ing] information data to be displayed," is described in the specification as the second program module selecting and displaying demographically targeted banner advertisements. "A second one of the regions comprises an information display region which can display such things as banner advertisements. The second program module is operable upon execution to select informational data to be displayed in the information display region." ('010 patent, col. 4, ll. 32-37; *see also* col. 16, ll. 12-14 ("The first tier is the initial selection of banners to be downloaded to the user based on the user's demographic information").) The specification provides no algorithm for performing this selecting function. The specification merely mentions that "ADM module 14 simply provide[s] the basic logic and rules which govern the display and reporting functions" (*id.* col. 8, ll. 13-14), but nowhere describes "the basic logic and rules" that the ADM module purportedly uses to select demographically targeted banners for display. The ADM module is merely a black box that performs the claimed function, not structure. *Blackboard*, 547 F.3d at 1383. The specification merely repeats the desired result without explaining how to achieve it. "By storing the demographic data at the client itself, demographic targeting of advertising can be accomplished if desired by client software application 10 itself." ('010 patent, col. 18, ll. 26-29.) This is a wish, not an algorithm.

For the second function of the second program module, "in response to notifications from said first program module to select the information data to be displayed from among a larger set

of said informational data," the specification refers to "targeting of banner advertisements based upon the type of link (financial, news, sports, etc.) selected by the user." (*Id.* col. 4, ll. 47-49.) But the patent provides no algorithm for performing this function. Figure 12 illustrates a box labeled with the result "Select & Display Banner," but no algorithm for achieving it. The specification describes associating banner advertisements with one or more associated "category identifiers specify[ing] those categories to which the banner relates. … For example, an advertisement for a securities brokerage would be related to finance and possibly business. By associating those category identifiers with the banner in database 130, ADM module 54 will be able to determine the proper time for display of the brokerage advertisement." (*Id.* col. 15, ll. 6-14.) But the patent does not describe how the ADM module is supposed to determine the "proper time for display" of a particular banner. The general notion of associating categories with banners and links is not an algorithm, but a purely functional description of a desired result. As this court held in *Asentinel*, "comparing several elements; and . . . arranging common elements into common categories" is "purely functional." *Asentinel*, 2012 WL 1097336 at *7. The patent's other descriptions of selecting advertisements based on user selections are purely aspirational. For example, the patent recites: "Apart from the category identifiers, each banner can also have a number of keywords associated with it and ADM module 54 can be programmed to examine the web pages visited by the user to determine if any of those keywords are present. … If so, one of the banners associated with the located keyword could be displayed." ('010 patent, col. 16, ll. 1-8.) Again, this is a wish, not an algorithm.

The final function of the second program module is "to store statistical data regarding the display of said selected informational data." The flow chart in figure 12 illustrates a box numbered 226 and labeled with the function "Record Event, Time & Banner Display," but provides no algorithm. The specification is no better. "Flow then moves to block 226 where a record is made of the occurrence of the event, the display of the banner, and the time that the event oc-

curred." (*Id.* col. 19, l. 67 – col. 20, l. 2.) Repeating the result, no matter how many times, does not convey the solution necessary to achieve that result—the basic requirement of any valid patent.

Because both asserted patents use purely functional language to claim computer programs without disclosing algorithms for performing any of the claimed functions, they violate the well-established rule against functional claiming and are thus invalid.[3]

II. THE ASSERTED PATENTS VIOLATE THE POSSESSION RULE AND ARE, THUS, INVALID.

A. The Possession Rule

"[A] patent is not a hunting license. It is not a reward for the search, but compensation for its successful conclusion." *Ariad Pharm., Inc. v. Eli Lilly and Co.*, 598 F.3d 1336, 1353 (Fed. Cir. 2010) (quoting *Brenner v. Manson*, 383 U.S. 519, 536 (1966)). A patentee can claim only the invention that he possesses, that is what he has invented and described in his patent application—"and if he claims more his patent is void." *O'Reilly*, 56 U.S. at 121; *MySpace, Inc. v. GraphOn Corp.*, 672 F.3d 1250, 1256 (Fed. Cir. 2012) ("An inventor is entitled to claim in a patent what he has invented, but no more"). To hold otherwise would violate the patent system's basic bargain "in which the public is given 'meaningful disclosure in exchange for being excluded from practicing the invention for a limited period of time.'" *Carnegie Mellon Univ. v. Hoffmann-La Roche Inc.*, 541 F.3d 1115, 1122 (Fed. Cir. 2008) (quoting *Univ. of Rochester*, 358 F.3d at 922).

The possession requirement is codified in the first paragraph of Section 112, which requires that the specification include a written description of the actual *invention*, not merely a

[3] The remaining claims of the '290 and '010 patents, the claims that B.E. does not assert against Amazon, suffer from the same deficiencies because they claim the same programs purely by their functions without reciting any algorithms or steps required to perform those functions. The specifications of the patents do not remedy the shortcomings of the claims rendering the patents indefinite.

recitation of useful *results* which some unidentified structure might achieve. *Regents of the Univ. of Cal. v. Eli Lilly & Co.*, 119 F.3d 1559, 1568 (Fed. Cir. 1997) ("The description requirement of the patent statute requires a description of an *invention*, not an indication of a *result* that one might achieve if one made that invention") (emphasis added) (citing *In re Wilder*, 736 F.2d 1516, 1521 (Fed. Cir.1984). "Requiring a written description of the invention limits patent protection to those who actually perform the difficult work of 'invention'—that is, conceive of the complete and final invention with all its claimed limitations—and disclose the fruits of that effort to the public." *Ariad Pharm., Inc.*, 598 F.3d at 1353. The description of the invention must be within "the four corners of the specification." *Id*. at 1351, 1366, 1368. Most important, for computer-implemented inventions, the possession rule also requires "disclosure of the computer algorithm in sufficient detail to demonstrate to one of ordinary skill in the art that the inventor possessed the invention including how to program the disclosed computer to perform the claimed function." (Examination Guidelines at 7171.)

The disclosure required to show possession must be commensurate with the full scope of the claims to "ensure that the scope of the right to exclude, as set forth in the claims, does not overreach the scope of the inventor's contribution to the field of the art as described in the patent specification." *Rochester* 358 F.3d at 920 (citing *Reiffin v. Microsoft Corp.*, 214 F.3d 1342, 1345 (Fed. Cir. 2000)). As a result, even where, unlike here, a patent discloses a specific algorithm for performing a software function, the patentee is still not entitled to own all present and future ways of doing so. For example, in *Lizardtech, Inc. v. Earth Resource Mapping, Inc.*, 424 F.3d 1336 (Fed. Cir. 2005), the Federal Circuit affirmed the invalidity of broad claims to "creating a seamless array of DWT coefficients generically" because the patent described only a single method and algorithm. *Lizardtech, Inc.*, 424 F.3d at 1345. As the Federal Circuit explained,

> suppose that an inventor created a particular fuel-efficient automobile engine and described the engine in such detail in the specification that a person of ordinary skill in the art would be able to build the engine. Although the specification would meet the requirements of section 112 with respect to a claim directed to that particular engine, it would not necessarily support a broad claim to every possible type of fuel-efficient engine, no matter how different in structure or operation from the inventor's engine.

Id. at 1346.

B. The Asserted Claims Are Not Supported by the Patent Specifications and Are, Thus, Invalid for Failing the Possession Rule.

Here, again, the asserted patents fail to disclose any algorithms for performing any of the functions that the patents attempt to broadly claim and certainly do not show possession of "any and all means" for achieving the claimed objectives. For many of the claimed functions, the specifications merely repeat the functional language from the claims (*e.g.*, "Display GUI", "Run Default Browser," "Select & Display Banner"). But merely repeating the *name* of a function cannot possibly show possession of even one, much less all, ways of performing such a function. *Ariad Pharm, Inc.*, 598 F.3d at 1350 ("[W]e rejected the argument that 'only similar language in the specification *or original claim* is necessary to satisfy the written description requirement") (emphasis in the original) (citing *Fiers v. Revel*, 984 F.2d 1164, 1171 (Fed. Cir.1993)). For other claimed functions, the specifications suggest that with some unspecified programming the claimed functions could be performed (*e.g.*, "ADM module can be programmed to examine the web pages"). This too is insufficient. *Eli Lilly*, 119 F.3d at 1568 ("The description requirement of the patent statute requires a description of an invention, not an indication of a result that one might achieve if one made that invention") (citing *Wilder*, 736 F.2d at 1521). For the rest of the claimed functions, the patents rely on one of skill in the art to find solutions (*e.g.*, "[a]s will be appreciated by those of skill in the art … this permits the display of advertising that is relevant to what the user is doing at any particular time" ('010 patent, col. 16, ll. 24-35), "programming

used to generate these regions … is well within the level of skill in the art" (*id.* col. 9, ll. 36-39)). That too fails. *Lockwood v. Am. Airlines, Inc*. 107 F.3d 1565, 1572 (Fed. Cir. 1997) ("[The written description requirement] 'is not a question of whether one skilled in the art might be able to construct patentee's device from the teachings of the disclosure. … Rather, it is a question whether the application necessarily discloses that particular device'") (citing *Jepson v. Coleman*, 314 F.2d 533 (Fed. Cir. 1963)). Because the asserted patents do not show that the inventor was in possession of an algorithm to perform any, much less all, of the claimed functions, the patents are invalid under the first paragraph of Section 112.

CONCLUSION

For the foregoing reasons, Amazon respectfully requests that the Court grant its Motion to Dismiss the amended complaint in its entirety with prejudice.

Respectfully submitted,

s/ Glen G. Reid, Jr.
Glen G. Reid, Jr. (#8184)
WYATT, TARRANT & COMBS, LLP
1715 Aaron Brenner Dr., Suite 800
Memphis, TN 38120-4367
Phone: 901.537.1000
Facsimile: 901.537.1010
greid@wyattfirm.com

s/ Mark Vorder-Bruegge, Jr.
Mark Vorder-Bruegge, Jr. (#06389)
WYATT, TARRANT & COMBS, LLP
1715 Aaron Brenner Dr., Suite 800
Memphis, TN 38120-4367
Phone: 901.537.1000
Facsimile: 901.537.1010
mvorder-bruegge@wyattfirm.com

-and-

J. David Hadden
dhadden@fenwick.com
Darren F. Donnelly
ddonnelly@fenwick.com
Saina S. Shamilov
sshamilov@fenwick.com
Ryan J. Marton
rmarton@fenwick.com
Clifford Web
cweb@fenwick.com
Justin Hulse
jhulse@fenwick.com
FENWICK & WEST LLP
801 California Street, 6th Floor
Mountain View, CA 94041
(650) 988-8500

Counsel for Defendant
AMAZON DIGITAL SERVICES, INC.

CERTIFICATE OF SERVICE

The foregoing document was filed under the Court's CM/ECF system, automatically effecting service on counsel of record for all other parties who have appeared in this action on the date of such service.

s/ Mark Vorder-Bruegge, Jr.
Mark Vorder-Bruegge, Jr.